Inspection Date: November 5, 2014

Start: 9:05 AM End: 12:01 PM

Weather: cloudy, recent rain, low 50s

Site: Gerald Hall/4-H Farm/Trenton Energy

Location: Ritchie County, WV

39.263°, -81.072°

On November 5, 2014, representatives from the U.S. Environmental Protection Agency (EPA) conducted a Clean Water Act Section 404 inspection at the Gerald Hall/4-H Farm/Trenton Energy Property with representatives from the U.S. Army Corps of Engineers – Huntington District; West Virginia Department of Environmental Protection (WVDEP) Environmental Enforcement (EE) and Oil and Gas (OOG) offices; West Virginia Division of Natural Resources (WVDNR); and U.S. Fish and Wildlife Service (USFWS). Representatives from Trenton Energy; their environmental consultants, Alliance Consulting; and their counsel, Steptoe & Johnson, were also present. See sign-in sheet for complete list of attendees.

Background: Site Location and Hydrologic Connectivity

Mr. Gerald Hall (or companies with which he is associated) cleared and constructed on property (Site) located off of Ritchie County School Road, Ellenboro, Ritchie County, West Virginia (26346). The Site is located north of the Trenton Energy industrial complex that fronts US-50, also located on Mr. Hall's property. The Site is located adjacent to an unnamed tributary to Hushers Run. From the Site, the unnamed tributary flows approximately 0.2 miles (1,200 linear feet) south to Hushers Run, and then approximately 3.4 miles (5.475 km) to Bonds Creek, then 1.9 miles (3.129 km) to the North Fork Hughes River, then 20.8 miles (33.465 km) to the Hughes River, then 14.1 miles (22.782 km) to the Little Kanawha River, then 18.1 miles (29.093 km) to the Ohio River. The nearest RHA Section 10 water that has been formally identified by the U.S. Army Corps of Engineers, Huntington District, is the Little Kanawha River, which is considered navigable 14.9 miles above its mouth to the Ohio River. The distance from the Site to this navigable point is therefore approximately 43.6 miles.

Background: Site History

The Site appears to be owned and developed by Mr. Hall or his companies. Based on information from the WVDEP, construction of the Site occurred in 2012. WVDEP conducted a flyover of the Site on August 31, 2012. Photos from the flyover show that it had recently been cleared.

The Site appeared to be mixed-use, as it consists of gravel pads/pipe lay down areas and cleared land with hay bales.

Page **1** of **4**

Soils

According to Soil Survey Geographic Database (SSURGO) mapping, the southern portion of the Site is underlain by Vandalia silt loam (10-20% slopes)(VaC) and the northern by the Gilpin-Upshur complex (30-40 percent slopes)(GuE).

- The Vandalia component makes up 80 percent of the VaC map unit and is located on hillslopes on hills. The parent material consists of silty and clayey colluvium derived from interbedded sedimentary rock. The natural drainage class is well drained. This soil is not flooded nor ponded. This soil does not meet hydric criteria.
- The Gilpin component makes up 40 percent of the GuE map unit and is located on hillslopes on hills. The parent material consists of fine-loamy residuum weathered from shale and siltstone. The natural drainage class is well drained. This soil is not flooded nor ponded. This soil does not meet hydric criteria.
- The Upshur component makes up 35 percent of the GuE map unit and is located on hillslopes on hills. The parent material consists of clayey residuum weathered from clayey shale. The natural drainage class is well drained. This soil is not flooded nor ponded. This soil does not meet hydric criteria.

Wetlands

The National Wetland Inventory (NWI) maps a freshwater pond (PUB) at the southwest corner of the Site; however, GIS imagery does not appear to support the presence of the feature at this location. Evidence of a pond was not observed during the inspection.

While wetland areas were observed at the Site, it did not appear that wetlands had been impacted by construction of the Site.

Streams

Mainstem, UNT 1

UNT 1, a tributary to Hushers Run, is a mapped USGS NHD- and SAMB-mapped stream that flowed north to south through the Site. The USGS classifies UNT1 as an intermittent stream. Approximately 1,360 If of UNT 1 had been filled/relocated for construction or clearing of the Site.

Upstream and downstream of the limit of disturbance, the stream had a defined bed and bank. Caddisfly cases, a mayfly, stoneflies, and a water penny were observed in the stream. Channel width was approximately 2 If wide. Substrate consisted of cobble, gravel*, and silt*. At the time of the inspection, the stream was flowing. Water depth in pools was at least 3". Grade was moderate to low and meanders were observed in the upstream, undisturbed reach. Banks

Page **2** of **4**

were observed to be 2' high and undercut in some areas. Other areas along the bank were observed to be stable. We confirmed the stream to be at least intermittent.

Below the LOD, the stream was straightened and narrow. Vegetation was observed growing into the impacted stream channel. Vegetation had been mowed/maintained. A portion of UNT 1 had been relocated to a ditch along the Site's western edge which discharged to UNT 3. Structures resembling rock check dams (though constructed with larger rocks) were located in the channel. WVDEP stated that while they did not authorize the dams, they did authorize BMPs which included the construction of a sediment pond(s) east of the relocated stream. Slopes were unstable and observed to be slipping into the relocated stream.

UNT 2

UNT 2 is a tributary to UNT 1 and a SAMB-mapped stream that flowed west to UNT 1. Approximately 60 If of UNT 2 had been filled. American beech (*Fagus grandifolia*) and white oak (*Quercus alba*) leaves were observed in the channel and riparian vegetation included Christmas fern (*Polystichum acrostichoides*). Though located in a natural valley, at the time of the inspection, the stream was not flowing. Upstream of the filled area, the stream had a steppool structure, defined bed and bank, observable leafpacks, and substrate consisting of silt, gravel, cobble, and some boulder. An eastern newt (*Notophthalmus viridescens*) was also observed in the channel. Woody debris just upstream of the LOD was catching leaves and appeared to be disrupting channel morphology. Below this point, the channel flattened and widened, and became less defined.

The area where UNT 2 had been filled had developed pools of standing water and hydrophytic vegetation including soft rush (*Juncus effusus*), bulrush (*Scirpus* sp.), yellow nutsedge (*Cyperus esculentus*), some cattail (*Typha* sp.), and sedges (*Carex* sp.). Non-hydrophytic vegetation included clover (*Trifolium* sp.).

UNT 3

UNT 3 is a tributary to UNT 1 and a SAMB-mapped stream that flowed southeast and then east to UNT 1. Approximately 700 If of UNT 3 had been impacted. The upper extent of the impacted reach had been relocated for construction of the southwest portion of the Site and large-rock check dams had been constructed in the channel. Erosion was observed downstream of these dams. At the relocated stream bend, the channel had been rock-lined with boulders. UNT 3 drains to UNT 1, which is reportedly culverted under the parking lot of Simonton Windows downstream of the Site.

Upstream of the recent disturbance (reference), UNT 3 was flowing, had defined bed and bank throughout, and had a channel width of approximately 1-2 lf. The reach flowed through two small wetland areas dominated by sedges (*Carex* sp.), bulrush (*Scirpus* sp.) and deertongue (*Dichanthelium clandestinum*). Upstream of the wetland areas, substrate was graveldominated with some cobble. In the vicinity of the wetlands, stream substrate was siltier.

Estimated Stream Impacts:

Stream ID	Estimated impact (If)
UNT 1	1,360
UNT 2	60
UNT 3	700
Total	2,120